

AMENDMENTS TO THE SPECIFICATION

Please replace the abstract of the disclosure, paragraph 0050 in the application, with the following amended paragraph 0050:

-- [0050] ~~Disclosed herein is a~~ A method of making a gas treatment device, the method includes projecting a laser line onto a side of substrate from a laser line generator angled away from a viewing source; projecting a laser dot onto the substrate from a laser dot generator located above the viewing source; verifying an alignment of the substrate with at least one of: another substrate and a housing by comparing the laser line projection on the substrate to the laser dot projection on the substrate, wherein the alignment is verified when the laser line projection and the laser dot projection are co-linear; and stuffing the substrate into the housing. --

Please replace paragraph 0029 located on pages 7 and 8 of the application with the following amended paragraph 0029:

-- [0029] Referring now to Figure 2, which is three dimensional schematic representation of system 100, the laser dot generator 12 may be positioned anywhere in the system 100, as long as laser dot generator 12 is positioned in the system 100 relative to line generator 14 and viewing source 14 16 such that viewing source 16 is capable of observing a shift in the work piece 18 as discussed above. For example, the laser dot generator 12 may be positioned on either side of the viewing source 16, wherein the laser dot generator 12 is positioned at an angle α (angle alpha) less than or equal to 15° away from the viewing source 16, with an angle of less than or equal to about 10° more preferred, and most preferred is a position where the laser dot generator 12 is in the same line as viewing source 16 (i.e., a 0° degree angle relative to viewing source 16). Moreover, the laser dot generator 12 may be positioned at an angle δ (angle delta) relative to a horizon 26 (e.g., the floor of the manufacturing facility). For example, the laser dot generator 12 may be positioned at an angle of about 40° up to about 50° relative to the horizon, with an angle of about 42° to about 45° preferred. Additionally, laser dot generator 12 is positioned at an angle θ (angle theta) relative to laser line generator 14,

such that the laser line generator 14 is capable of projecting a laser line in the general direction of the viewing source 16. For example, the laser dot generator 12 is positioned to project a dot that meets the laser line from laser line generator 14 at an angle of about 80° to about 100° , with an angle of about 85° to about 95° more preferred.--

Please replace paragraph 0030 located on page 8 of the application with the following amended paragraph 0030:

-- [0030] Similarly, laser line generator 14 may also be positioned at an angle relative to the horizon 26. For example, the laser ~~dot~~ line generator 14 may be positioned at an angle β (angle beta) of about 40° up to about 50° relative to the horizon, with an angle of about 42° to about 45° preferred. Moreover, the laser line generator may be position at any an angle away from the viewing source 16, such that viewing source 16 is capable of viewing a shift in the work piece as discussed above. For example, the laser line generator may be positioned at an angle ω (angle omega) of about 80° to about 100° relative to the viewing source 16, with an angle of about 85° to about 95° more preferred.--

Please replace paragraph 0032 located on page 9 of the application with the following amended paragraph 0032:

-- [0032] Viewing source 16 may be, for example, a human operator of the stuffing machine, since the projected laser line and the projected laser dot may be capable of being observed by a human eye. As such, the operator upon seeing that the projected laser line and the projected laser dot are not co-linear may adjust the substrate as discussed above. In other embodiments, a commercially available vision system may be programmed to monitor the relationship between the projected laser line and the projected laser dot to prevent initiation of the machine cycle if a co-linear relationship is not detected. The vision system is cable of sensing differences in light adsorption of a material. For example, the laser dot and/or laser line will appear as a being lighter brighter projected against the darker substrate as observed by the vision system. As such, the vision system will be able to detect the relative position of the laser dot and laser line on the substrate. The vision system may be then be used to provide feedback as to

whether the substrate is aligned relative to the shell and or relative to another substrate. Based on this feedback, the stuffing machine can be shut down and/or the substrate position can be adjusted. For example, the human operator may adjust the position of the substrate based on this feedback.--

Please replace paragraph 0033 located on pages 9 and 10 of the application with the following amended paragraph 0033:

-- [0033] Figures 3-4 illustrates a rotation sensing system generally designated 200, which may be used to determine the alignment of at least two substrates prior to stuffing. The system comprises a laser line generator 14, a viewing source 16, and a work piece 18 having a major axis 20. In this example, work piece 18 comprises at least two oval shaped substrates. As will be discussed in greater detail, laser line generator 14 projects a laser line onto the oval side of the substrates. Viewing source 16 (e.g., a "low tech vision system") is positioned at an angle κ (angle kappa) relative to laser line generator 14, such that viewing source 16 is capable of observing a "split" in the laser line if the substrates are not aligned relative to each other. The term "split" is used herein to generally describe the perceived shift in the laser line observed from the viewing source 16 if the substrates are not aligned relative to each other within a pre-determined tolerance. If work piece 18 is aligned, i.e., the at least two oval substrates are aligned, the projected laser line will appear to be unbroken to viewing source 16. If the at least two oval catalysts are not aligned, as shown if Figure 3, the laser line will appear to be broken and shifted where it crosses the plane representing the adjoining faces of the substrates.--

Please replace paragraph 0034 located on page 10 of the application with the following amended paragraph 0034:

-- [0034] For example, Figure 3 illustrates a two-degree rotational misalignment of the oval shaped substrates, which results in a 1.34 millimeters (mm) break in the projected laser line when viewed at a 45-degree angle, i.e., when angle kappa is a 45-degree angle. The vision system detects this shift and, if it exceeds a pre-determined limit, prevents the stuffing machine cycle from proceeding. Moreover, if a human operator is the viewing source, the human operator may visually see the shift in the line

across the joint of the two substrates and may take appropriate actions to align the substrates prior to the stuffing operation.--

Please replace paragraph 0043 located on page 12 of the application with the following amended paragraph 0043:

-- [0043] Referring to Figure 3 5, a stuffing apparatus generally designated 300 is illustrated. Pusher detail 360 is preferably dimensioned such that the squareness of the substrate face to the axis of travel is maintained during the stuffing operation. Retention material 340 is disposed about substrate(s) 330/ 331/ 332 to form a retention material/substrate subassembly 345. This subassembly 345 is disposed in physical contact with both a main face of pusher detail 362. Disposed at the end of the stuffing cone 300 having the smaller diameter, in operable communication with pusher detail 360 and in physical contact with locating cavity 320, is an end of housing 310. The pusher detail 360 applies pressure to retention material/substrate subassembly 345 in the direction of the interior of housing 310. --